

## UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT		ATTORNEY DOCKET NO.	
08/571.091	12/12/95	IRGANG	M	07-45, 497	
				EXAMINER	
		A1M1/0627			

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A1M1/0627

EXAMINER				
ART UNIT	PAPER NUMBER			
1173				

DATE MAILED:

06/27/96

## Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

A shortened statutory period for response to this action is set to expire three months(s), or thirty days, whichever is longer, from the date of this communication.

## Office Action Summary

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Application No.

Applicant(s)

08/571,091

Irgang et al.

Examiner

Nadine Preisch

Group Art Unit 1106



■ Responsive to communication(s) filed on Mar 26, 1996	·				
☐ This action is <b>FINAL</b> .					
☐ Since this application is in condition for allowance except for fo in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C					
A shortened statutory period for response to this action is set to exist longer, from the mailing date of this communication. Failure to rapplication to become abandoned. (35 U.S.C. § 133). Extensions 37 CFR 1.136(a).	respond within the period for response will cause the				
Disposition of Claims					
X Claim(s) 1-6	is/are pending in the application.				
Of the above, claim(s)	is/are withdrawn from consideration.				
Claim(s)	is/are allowed.				
X Claim(s) 1-6	is/are rejected.				
Claim(s)					
☐ Claims					
Application Papers					
☐ See the attached Notice of Draftsperson's Patent Drawing R	eview, PTO-948.				
☐ The drawing(s) filed on is/are objected	d to by the Examiner.				
☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.					
☐ The specification is objected to by the Examiner.					
☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. § 119					
Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).					
☐ All ☐ Some* X None of the CERTIFIED copies of the priority documents have been					
🔀 received.					
received in Application No. (Series Code/Serial Number)					
received in this national stage application from the International Bureau (PCT Rule 17.2(a)).					
*Certified copies not received:					
Acknowledgement is made of a claim for domestic priority u	Inder 35 U.S.C. § 119(e).				
Attachment(s)					
<ul><li>☒ Notice of References Cited, PTO-892</li><li>☐ Information Disclosure Statement(s), PTO-1449, Paper No(s</li></ul>	1				
☐ Interview Summary, PTO-413	·				
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948					
☐ Notice of Informal Patent Application, PTO-152					
SEE OFFICE ACTION ON THE FOLLOWING PAGES					

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## Rejection Under 35 USC 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-6 are rejected under 35 U.S.C. § 103 as being unpatentable over Bailar (Comprehensive Inorganic Chemistry, Ed: J.C. Bailar Jr., Pergamon Press, 1973, pp. 424-426) or Kortbeek et al. (4,440,875).

Applicants are claiming a catalyst or carrier which consists essentially of monoclinic zirconium dioxide prepared by precipitation of a zirconium salt with ammonia. The process comprises the addition of a zirconyl nitrate or zirconyl chloride to an aqueous ammonia solution at a decreasing pH from 14 to 6, followed by drying, calcination, and pelletization.

The Bailar reference teaches a composition consisting of monoclinic zirconium dioxide.

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In view of the foregoing, the examiner recognizes applicants' claims as product by process claims. Furthermore, the examiner notes that the applicants' composition is essentially the same as the composition disclosed in the Bailar reference. Since applicants' claims are product by process claims, they are not limited to the manipulations of the recited steps, but only to the structure implied by the steps. See for example, <u>In re Thorpe</u>, 777F.2d 695, 227 USPQ 964, 966(Fed. Cir. 1985) or <u>In re Marosi</u>, 218 USPQ 289(Fed. Cir. 1983).

Moreover, the reference Kortbeek et al.(4,440,875) teaches the preparation of a zirconium dioxide catalyst prepared by precipitation of a zirconium salt with ammonia. For example, see column 1, lines 62-68. The process comprises the addition of ammonia to an aqueous zirconyl chloride solution, until the pH of the solution is in the range of 7 to 10. At this point, the precipitate is separated from the solution and calcinated. See for example, column 2, lines 1-4.

The examiner notes that the Kortbeek reference teaches that the ammonia is added to the zirconyl chloride solution instead of vice versa, as in applicants' claim 1.

In view of the foregoing, it is the examiner's position that it would have been obvious to one of ordinary skill in the art that the order of solution addition, pertaining to zirconyl chloride and ammonia, does not matter, since the same pH could be achieved by slow addition with mixing in any order. Moreover,

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applicants' examples set forth within the specification are not comparative to the closest prior art of Kortbeek et al.(4,440,875).

Furthermore, the examiner notes that the zirconium dioxide claimed in the pending application is monoclinic. Although the prior art of Kortbeek et al.(4,440,875) does not mention any particular structural limitation, the monoclinic property is presumed to be inherent, since the claimed and prior art products are produced by substantially the same process. For example, see In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Moreover, applicants' claims say nothing about any added precaution step taken to achieve monoclinic zirconium dioxide.

Therefore, the differences between the subject matter sought to be patented the prior art are such that the subject matter as a whole would have been obvious to one of ordinary skill in the art.

The examiner has further considered the limitations of the dependent claims, but considers them within the purview of the prior art.

Furthermore, the examiner has not considered all the references listed in applicants' information disclosure statement. This is in part because the pending application does not contain an English translation of all disclosure documents.

Acknowledgment is made of applicant's claim for priority based on an application filed in the Federal Republic of Germany

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on December 17, 1994. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. § 119.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadine Preisch whose telephone number is  $(703)\ 305-2667$ . The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony McFarlane, can be reached on (703) 308-3806. The fax phone number for this Group is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

N.P. June 26, 1996

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PATENT EXAMINATE ART UNIT 11